

CLAIMS**1. Beverage vending machine (1) comprising:**

- a turret (7) for accommodating one or more stacks (9) of cups;
- support means (13) associated to said turret (7), which cooperate with the first cup (10) of each one of such stacks (9) to support them in said turret (7);
- an arm (14) moving between a first release position and a second gripping position thereof, and provided with a first jaw (16a) and a second jaw (16b) capable of moving relative to each other;
- a receptacle (11) comprising one or more compartments (12) for receiving one or more of such cups removed from said stacks (9),

characterized in that at least one of said first and second jaws (16a, 16b) comprises actuation means (17) that cooperate with said support means (13) to cause a first cup (10) to be removed from one of said stacks (9), and comprises at least a movable hook (18) adapted to get engaged between the upper edge (19) of said first cup (10) in one of said stacks (9) and the upper edge (20) of the next cup (10') following said first cup (10) in the same stack (9) when said arm (14) is in said second gripping position thereof.

30

2. Beverage vending machine (1) according to claim 1, in which said actuation means (17) are constituted by jutting parts.

3. Beverage vending machine (1) according to claim 1, in which said at least a hook (18) comprises a shoe (21) adapted to slide on at least a surface (22) of said turret (7) to drive said hook (18) into moving.

5 **4. Beverage vending machine (1) according to claim 3, in which said at least a surface (22) is formed by a fork (27) comprising at least a plane (24) that is inclined relative to the longitudinal axis of said turret (7).**

10 **5. Beverage vending machine (1) according to claim 3 or 4, in which said at least a surface (22) is associated to said turret (7) in a pivotally swinging manner.**

6. Beverage vending machine (1) according to claim 4, in which said fork (27) is constituted by a thin flexible strip.

15 **7. Beverage vending machine (1) according to any of the preceding claims, in which said at least a hook (18) is constituted by a small plate having a first end portion thereof bent in a hook-like manner and a second end portion thereof that is connected in a pivotally swinging manner to one of said jaws (16a, 16b).**

8. Beverage vending machine (1) according to any of the preceding claims, in which said at least a hook (18) is movable against the action of elastic means.

25 **9. Beverage vending machine (1) according to any of the preceding claims 1 to 7, in which said at least a hook (18) is constituted by a flexible body.**

30 **10. Beverage vending machine (1) according to any of the preceding claims, in which said support means (13) are connected in a pivotally swinging manner to said turret (7) and include a retainer (25) that is adapted to engage the upper edge (19) of a first cup (10), said retainer**

being provided with a cam-like profile (26), which said actuation means (17) are capable of sliding on.

11. Beverage vending machine (1) according to claim 10, in which said 5 actuation means (17) sliding on said cam-like profile (26) cause said retainer (25) to disengage said upper edge (19) of said first cup (10).

12. Beverage vending machine (1) according to claim 10 or 11, in which said support means (13) are movable against the action of elastic means.

10

13. Beverage vending machine (1) according to any of the preceding claims, characterized in that, when in said gripping position, said first and second jaws (16a, 16b) define a resting surface (13) for the upper edge (19) of said first cup (10) in one of said stacks (9) to rest upon.

15

14. Beverage vending machine (1) according to claim 13, further comprising a device for the adjustment of the position of said jaws (16a, 16b) relative to each other in view of adapting said resting surface (23) to support cups having differently long upper edges (19, 20).

20

15. Beverage vending machine (1) according to any of the preceding claims, in which said receptacle (11) is movable to convey said one or more cups removed from said stacks (9) into one or more dispensing sites (5).

25

16. Beverage vending machine (1) according to any of the preceding claims, in which said arm (14) is mounted slidably on a runner (15) arranged so that said first cup-release position thereof comes to be situated in the proximity of said receptacle (11) and said second cup 30 gripping position thereof lies in the proximity of said first cup (10) of each one of the stacks (9).

16. Beverage vending machine (1) according to any of the preceding

claims, in which said turret (7) is adapted to accommodate stacks (9) of variously sized cups.